Please replace claim 54 as follows:

C2 54. (once amended) The process of claim 53 wherein the process is conducted in a continuous reactor system.

Please replace claim 150 as follows:

150. (twice amended) A process as set forth in claim 147 wherein, before said oxidation of said reagent, the catalyst is characterized such that no more than about 1.2 mmole of carbon monoxide per gram of catalyst is desorbed when a dry sample of the catalyst, after being heated at a temperature of about 500°C for about 1 hour in a hydrogen atmosphere and before being exposed to an oxidant following the heating in a hydrogen atmosphere, is heated in a helium atmosphere from about 20 to about 900°C at a rate of about 10°C per minute, and then at about 900°C for about 30 minutes.

Please replace claim 151 as follows:

C3 151. (twice amended) A process as set forth in claim 150 wherein, before said oxidation of said reagent, the catalyst is characterized such that no more than about 0.7 mmole of carbon monoxide per gram of catalyst is desorbed when a dry sample of the catalyst, after being heated at a temperature of about 500°C for about 1 hour in a hydrogen atmosphere and before being exposed to an oxidant following the heating in a hydrogen atmosphere, is heated in a helium atmosphere from about 20 to about 900°C at a rate of about 10°C per minute, and then at about 900°C for about 30 minutes.

Please replace claim 152 as follows:

152. (twice amended) A process as set forth in claim 151 wherein, before said oxidation of said reagent, the catalyst is characterized such that no more than about 0.5 mmole of carbon monoxide per gram of catalyst is desorbed when a dry sample of the catalyst, after being heated at a temperature of about 500°C for about 1 hour in a hydrogen atmosphere and before being exposed to an oxidant following the heating in a hydrogen

atmosphere, is heated in a helium atmosphere from about 20 to about 900°C at a rate of about 10°C per minute, and then at about 900°C for about 30 minutes.

Please replace claim 153 as follows:

C3 concl'd

153. (twice amended) A process as set forth in claim 152 wherein, before said oxidation of said reagent, the catalyst is characterized such that no more than about 0.3 mmoles of carbon monoxide per gram of catalyst is desorbed when a dry sample of the catalyst, after being heated at a temperature of about 500°C for about 1 hour in a hydrogen atmosphere and before being exposed to an oxidant following the heating in a hydrogen atmosphere, is heated in a helium atmosphere from about 20 to about 900°C at a rate of about 10°C per minute, and then at about 900°C for about 30 minutes.

Please replace claim 242 as follows:

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242. (once amended) A process as set forth in claim 100 wherein the used particulate catalyst separated from the product mixture is recycled to the continuous reactor system and additional N-(phosphonomethyl)iminodiacetic acid or a salt thereof is contacted with said used catalyst and oxygen, thereby producing additional product mixture comprising N-(phosphonomethyl)glycine or a salt thereof.

C4

Please replace claim 243 as follows:

243. (once amended) A process as set forth in claim 242 further comprising:

separating said used particulate catalyst from said additional product mixture by filtration.

Please replace claim 244 as follows:

244. (once amended) A process as set forth in claim 243 further comprising repetitively contacting said used particulate catalyst with oxygen and further additional N-

C4 cancel

(phosphonomethyl)glycine or a salt thereof to produce further additional product mixture.

Please cancel claims 245 and 246.

Please replace claim 247 as follows:

C5

247. (once amended) A process as set forth in claim 242 wherein said particulate catalyst is slurried in a liquid reaction medium within said stirred tank reactor, said liquid reaction medium comprising N-(phosphonomethyl)iminodiacetic acid or a salt thereof.

Please add the following claims 248-300:

248. A process for oxidizing a reagent in a mixture, the mixture being able to solubilize a noble metal, the process comprising contacting the mixture with an oxidation catalyst in the presence of oxygen, wherein the catalyst:

comprises a carbon support having a noble metal at a surface of the carbon support; and

is characterized as yielding no more than about 1.2 mmole of carbon monoxide per gram of catalyst when a dry sample of the catalyst, after being heated at a temperature of about 500°C for about 1 hour in a hydrogen atmosphere and before being exposed to an oxidant following the heating in the hydrogen atmosphere, is heated in a helium atmosphere from about 20 to about 900°C at a rate of about 10°C per minute, and then at about 900°C for about 30 minutes.

C6

249. The process of claim 248 wherein the process is conducted in a continuous reactor system.

250. The process of claim 248 wherein said carbon monoxide yield is no greater than about 0.7 mmole of carbon monoxide per gram of catalyst.

251. The process of claim 248 wherein the mixture is acidic.

252. A process for oxidizing a reagent in a mixture which can solubilize a noble metal, the process comprising contacting the mixture with an oxidation catalyst in the presence of oxygen, wherein the catalyst:

comprises a carbon support having a noble metal and a promoter at a surface of the carbon support; and

is characterized as yielding no more than about 1.2 mmole of carbon monoxide per gram of catalyst when a dry sample of the catalyst, after being heated at a temperature of about 500□C for about 1 hour in a hydrogen atmosphere and before being exposed to an oxidant following the heating in the hydrogen atmosphere, is heated in a helium atmosphere from about 20 to about 900°C at a rate of about 10°C per minute, and then at about 900°C for about 30 minutes.

C6 cont'd

253. The process of claim 252 wherein the process is conducted in a continuous reactor system.

254. The process of claim 252 wherein said carbon monoxide yield is no greater than about 0.7 mmole of carbon monoxide per gram of catalyst.

255. The process of claim 252 wherein at least 0.05% by weight of the catalyst consists of at least one promoter.

256. A process for oxidizing a reagent in a mixture which can solubilize a noble metal, the process comprising contacting the mixture with an oxidation catalyst in the presence of oxygen, wherein the catalyst comprises a carbon support having a noble metal, carbon, and oxygen at a surface of the carbon support, the ratio of carbon atoms to oxygen atoms at the surface being at least about 20:1 as measured by x-ray photoelectron spectroscopy after the catalyst is heated at a temperature of about 500°C for

about 1 hour in a hydrogen atmosphere and before the catalyst is exposed to an oxidant following the heating in the hydrogen atmosphere.

257. The process of claim 256 wherein the process is conducted in a continuous reactor system.

258. The process of claim 256 wherein said ratio of carbon atoms to oxygen atoms is at least about 30:1.

259. A process for oxidizing a reagent in a mixture which can solubilize a noble metal, the process comprising contacting the mixture with an oxidation catalyst in the presence of oxygen, wherein the catalyst:

comprises a carbon support having a noble metal, a promoter, carbon, and oxygen at a surface of the carbon support; and

is characterized as having a ratio of carbon atoms to oxygen atoms at the surface which is at least about 20:1 as measured by x-ray photoelectron spectroscopy after the catalyst is heated at a temperature of about 500□C for about 1 hour in a hydrogen atmosphere and before the catalyst is exposed to an oxidant following the heating in the hydrogen atmosphere.

C 6 cont'd

260. The process of claim 259 wherein the process is conducted in a continuous reactor system.

261. The process of claim 259 wherein said ratio of carbon atoms to oxygen atoms is at least about 30:1.

262. The process of claim 259 wherein at least 0.05% by weight of the catalyst consists of at least one promoter.

263. A process for oxidizing a reagent in a mixture which can solubilize a noble metal, the process comprising contacting the mixture with an oxidation catalyst in the presence of oxygen, wherein the catalyst comprises a carbon support having (a) a

noble metal at a surface of the carbon support; and (b) a surface layer having a thickness of about 50 Å as measured inwardly from the surface and comprising oxygen and carbon, the ratio of carbon atoms to oxygen atoms in the surface layer being at least about 20:1 as measured by x-ray photoelectron spectroscopy after the catalyst is heated at a temperature of about 500°C for about 1 hour in a hydrogen atmosphere and before the catalyst is exposed to an oxidant following the heating in the hydrogen atmosphere.

264. The process of claim 263 wherein the process is conducted in a continuous reactor system.

265. The process of claim 263 wherein said ratio of carbon atoms to oxygen atoms is at least about 30:1.

266. A process for oxidizing a reagent in a mixture which can solubilize a noble metal, the process comprising contacting the mixture with an oxidation catalyst in the presence of oxygen, wherein the catalyst:

comprises a carbon support having: (a) a noble metal and a promoter at a surface of the carbon support; and (b) a surface layer having a thickness of about 50 Å as measured inwardly from the surface and comprising carbon and oxygen; and

is characterized as having a ratio of carbon atoms to oxygen atoms in the surface layer of at least about 20:1 as measured by x-ray photoelectron spectroscopy after the catalyst is heated at a temperature of about 500□C for about 1 hour in a hydrogen atmosphere and before the catalyst is exposed to an oxidant following the heating in the hydrogen atmosphere.

C4 cont'd

267. The process of claim 266 wherein the process is conducted in a continuous reactor system.

268. The process of claim 266 wherein said ratio of carbon atoms to oxygen atoms is at least about 30:1.

269. The process of claim 266 wherein at least 0.05% by weight of the catalyst consists of at least one promoter.

270. A process for oxidizing a reagent in a mixture which can solubilize a noble metal, the process comprising:

forming an oxidation catalyst by a process comprising depositing a noble metal at a surface of a carbon support, and then heating the surface at a temperature of at least about 400°C; and

contacting the mixture with the oxidation catalyst in the presence of oxygen.

271. The process of claim 270 wherein the mixture is contacted with the oxidation catalyst in the presence of oxygen in a continuous reactor system.

272. The process of claim 270 wherein at least 0.05% by weight of the catalyst consists of at least one promoter.

C6 cont'd

273. The process of claim 272 wherein the promoter is more easily oxidized than the noble metal.

274. The process of claim 272 wherein the promoter comprises a metal selected from the group consisting of tin, bismuth, lead, cadmium, magnesium, manganese, nickel, aluminum, cobalt, titanium, antimony, selenium, iron, rhenium, cerium, zinc, and zirconium.

275. The process of claim 272 wherein the promoter comprises tin.

276. The process of claim 272 wherein the promoter comprises iron.

277. The process of claim 272 wherein the promoter comprises titanium.

278. The process of claim 272 wherein at least two promoters are deposited at the surface of the carbon support.

279. The process of claim 278 wherein the promoters comprise iron and tin.

280. The process of claim 272 wherein noble metal atoms at the surface are alloyed with the promoter.

281. The process of claim 272 wherein a majority of the noble metal atoms at the surface are alloyed with the promoter.

282. The process of claim 272 wherein substantially all of the noble metals at the surface are alloyed with the promoter.

283. The process of claim 270 wherein said temperature is at least about 500°C.

284. The process of claim 270 wherein, before the noble metal deposition, the carbon support has carbon and oxygen at a surface of the carbon support in amounts such that the ratio of carbon atoms to oxygen atoms at the surface is at least about 20:1 as measured by x-ray photoelectron spectroscopy.

285. The process of claim 270 wherein said heating is conducted in a non-oxidizing environment.

286. The process of claim 285 wherein the non-oxidizing environment comprises a reducing environment.

287. The process of claim 286 wherein the reducing environment comprises H_2.

288. A process for oxidizing a reagent in a mixture which can solubilize a noble metal, the process comprising:

forming an oxidation catalyst by a process comprising: (a) depositing a noble metal at a surface of a carbon support, and (b) exposing the surface to a reducing environment; and

contacting the mixture with the oxidation catalyst in the presence of oxygen,

wherein, before the noble metal deposition, the carbon support has carbon and oxygen at the surface of the carbon support in amounts such that the ratio of carbon atoms to oxygen atoms at the surface is at least 20:1 as measured by x-ray photoelectron spectroscopy.

289. The process of claim 288 wherein the mixture is contacted with the oxidation catalyst in the presence of oxygen in a continuous reactor system.

290. The process of claim 288 wherein at least 0.05% by weight of the catalyst consists of at least one promoter.

291. The process of claim 290 wherein the promoter is more easily oxidized than the noble metal.

292. The process of claim 290 wherein the promoter comprises a metal selected from the group consisting of tin, bismuth, lead, cadmium, magnesium, manganese, nickel, aluminum, cobalt, titanium, antimony, selenium, iron, rhenium, cerium, zinc, and zirconium.

293. The process of claim 290 wherein the promoter comprises tin.

294. The process of claim 290 wherein the promoter comprises iron.

295. The process of claim 290 wherein the promoter comprises titanium.

296. The process of claim 290 wherein at least two promoters are deposited at the surface of the carbon support.

297. The process of claim 296 wherein the promoters comprise iron and tin.

298. The process of claim 290 wherein noble metal atoms at the surface are alloyed with the promoter.

C16 cont'd

299. The process of claim 290 wherein a majority of the noble metal atoms at the surface are alloyed with the promoter.

300. The process of claim 290 wherein substantially all of the noble metals at the surface are alloyed with the promoter.